

## The City of Chicopee completes a critical upgrade to the Wastewater Treatment Plant - anticipates a 2.5 year payback with \$32,250 in annual energy cost savings

In a ceremony in Ware, in April 2018, the Baker-Polito Administration, though MassDEP's Clean Energy Results Program, with support from the Department of Energy Resources and the Massachusetts Clean Energy Center, awarded \$4 million in state Gap II grants to 36 Water and Wastewater Facilities for energy efficiencies and renewable power generation in the Commonwealth.

The City of Chicopee was awarded a \$200,000 State Gap II energy grant that was combined with a \$50,000 energy efficiency incentive from Chicopee Electric Light to upgrade half of the plant's biological aeration system. This project included replacement of impellers on two aerators and installation of VFDs on two aerators. It also included installation of a second dissolved oxygen probe in the aeration basin and controls system upgrades to automate aerator speed controls to help maximize biological treatment and energy efficiency.

The major components of the Project included the following:

- Crane work to remove old impellers and install new impellers
- Installation of VFDs for Aerators #5 and #6 and associated speed and automation upgrades
- Installation of new Dissolved Oxygen (DO) probe
- Installation of new LEL purge blowers and detectors

The City is expected to reduce its electricity usage by approximately 295,650 kilowatt hours (kWh) – resulting in projected cost savings of approximately \$32,250 annually.

Total Project Costs: \$ 331,900

Chicopee Electric Light Incentive: \$ 50,000 MassDEP's Gap II Grant Award: \$ 200,000

Subtotal \$ 250,000 City of Chicopee (cost share): \$ 81,900

Projected Annual Cost Savings: \$ 32,250

Projected Annual Electricity Savings: 295,650 kWh

Any questions about the project should be directed to Quinn Lonczak, Project Supervisor, at 413-594-3585 or <a href="mailto:glonczak@chicopeema.gov">glonczak@chicopeema.gov</a>









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